Title (en)

A DRUG DELIVERY DEVICE

Title (de)

WIRKSTOFFFREISETZUNGSVORRICHTUNG

Title (fr)

DISPOSITIF D'ADMINISTRATION DE MÉDICAMENT

Publication

EP 2643020 A4 20141112 (EN)

Application

EP 11843763 A 20111128

Priority

- ZA 201003748 A 20101126
- IB 2011055328 W 20111128

Abstract (en)

[origin: WO2012070027A1] The invention provides an inflammation-responsive implantable device for the in situ delivery of one or more pharmaceutically active agents to a human or animal. The device comprises two differential release bioresponsive polymeric matrices (BPMs): an outer polymetric matrix and an inner polymeric matrix, both of which contain at least one pharmaceutically active agent or drug, typically an antibiotic and an anti-inflammatory agent, respectively. The therapeutically effective agent may be emdedded in nanoparticles or nanobubbles. In response to inflammation, the pharmaceutically active agents are released, but at different rates: the rate of drug release from the inner polymeric matrix is lower than the rate of drug release from the outer polymeric matrix. Suitable polymers for forming the outer and inner polymeric matrices are hyaluronic acid and chitosan, respectively. A method of making the device and a method of treatment are also described.

IPC 8 full level

A61K 47/30 (2006.01); **A61K 31/00** (2006.01); **A61K 31/405** (2006.01); **A61K 31/496** (2006.01); **A61K 47/36** (2006.01); **A61P 29/00** (2006.01); **A61P 31/00** (2006.01)

CPC (source: EP US)

A61K 9/0024 (2013.01 - EP US); **A61K 9/0051** (2013.01 - EP US); **A61K 31/405** (2013.01 - EP US); **A61K 31/496** (2013.01 - EP US); **A61K 45/06** (2013.01 - US); **A61K 47/32** (2013.01 - EP US); **A61K 47/36** (2013.01 - EP US); **A61P 29/00** (2017.12 - EP); **A61P 31/00** (2017.12 - EP)

Citation (search report)

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- See references of WO 2012070027A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2012070027 A1 20120531; AP 2013006939 A0 20130630; BR 112013013123 A2 20180619; CN 103429266 A 20131204; EP 2643020 A1 20131002; EP 2643020 A4 20141112; US 2014023692 A1 20140123

DOCDB simple family (application)

IB 2011055328 W 20111128; AP 2013006939 A 20111128; BR 112013013123 A 20111128; CN 201180066184 A 20111128; EP 11843763 A 20111128; US 201113989401 A 20111128